

RE: Bolt Bin Picking

DEFENDANT'S

EXHIBIT

279

Subject: RE: Bolt Bin Picking**From:** "Jim Dara" <jimdara@braintech.com>**Date:** Sat, 1 Nov 2008 05:40:56 -0700**To:** "Adil Shafi" <adil.shafi@shafiinc.com>, "Rob Sim" <rsim@braintech.com>**CC:** "Jeff Beis" <jbeis@braintech.com>, "Rick Weidinger" <rick@weidingerfamily.com>, "Adil Shafi" <ashafi@braintech.com>, "Babak Habibi" <bhabibi@braintech.com>

I guess I am confused on the feedback. I am clear on the fact that eVF is not yet ready for prime time yet in this area. This is not a surprise given this stage of our business model.

What I am continually confused about is our Product Readiness status (and reason for Shafi acquisition) as it relates to Reliabot. Please reference the attachment.

Adil, in lieu of the attachment, can you please explain the reference to "rings" below. I am struggling to see the relationship between 1 foot diameter rings and 6mm hex head bolts. While the salesman in me can relate to your penchant for serious exaggeration of product capabilities, the shareholder and officer in me can't.

I don't think I can credibly reference this video as evidence of our expertise in this area. You have mentioned in the past multiple times that bin picking bolts (camera + laser stripe I believe) was something you had done in the past and was an existing Reliabot offering. This was again reviewed at the Summit meetings and is Item #2 in our Product Readiness Table with a Time to Market of 0 months, an Installed Base and serious Revenue attached to it.

I trust I am missing something. Please help me understand as our near term revenue model continues to rely on the merits of your product's readiness and the network of Reliabot engineers and integrators that will act as our channels.

Additionally, I would appreciate anything more specific you can offer up for my response to ABB?
Regards,

Jim Dara

Braintech Industrial Inc. - Intelligent Vision

248 219 9400

jimdara@braintech.comwww.braintech.com**From:** Adil Shafi [mailto:adil.shafi@shafiinc.com]**Sent:** Friday, October 31, 2008 11:36 AM**To:** Rob Sim**Cc:** Jim Dara; Jeff Beis; Rick Weidinger; Adil Shafi; Babak Habibi**Subject:** Re: Bolt Bin Picking

I agree. We should let Jim take it from here based on our feedback to him.

I think we should be completely clear that rings and bolts are not 'apples to apples'. We are currently working on cylindrical parts using a laser sensor. Because we have to build the sensor from scratch, we don't yet know what resolution we will have, which affects the minimum diameter we can reliably pick. We're starting with 3cm diameter crank shafts.

RE: Bolt Bin Picking

-----Original Message-----

From: Jim Dara
Sent: Fri 10/31/2008 4:32 AM
To: Adil Shafi
Cc: Jeff Beis; Rick Weidinger; Rob Sim; Adil Shafi
Subject: RE: Bolt Bin Picking

Regards,

Jim Dara

Braintech Industrial Inc. - Intelligent Vision

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From: Adil Shafi [<mailto:adil.shafi@shafiinc.com>]
Sent: Friday, October 31, 2008 7:30 AM
To: Jim Dara
Cc: Jeff Beis; Rick Weidinger; Rob Sim; Adil Shafi
Subject: Re: Bolt Bin Picking

Jim,

To add to Jeff's comments below,

Cylindrical parts bin picking (completely random) has been achieved in RELIABOT.

I have uploaded a movie to our public FTP site.

Address: [ftp://ftp1.ftptoyoursite.com/](ftp://ftp1.ftptoyoursite.com)
UN: brhicust20
PW: cu5t2031

It is called "random rings bin picking".

As usual, we need proper pictorial data to compare "apples to apples"

to make bin picking capability statements.

The exact specs on pictorial information needed is also at the FTP site.

The file that explains the picture gathering is called RELIABOT_Bin_Picking.pdf

Please request Mr. Osborn to supply pictorial information for candidate Bolts Bin Picking.

FYI, Joe Campbell, my mentor from 1990, has recently joined ABB

RE: Bolt Bin Picking

as their VP of Sales and Marketing.

Regards, Adil

Jim:

For eVF RBP we do not currently have this capability. It is slated as our "next big thing" for RBP. We have started development, but only just. Of course we have plenty of good bin-picking infrastructure, but the vision algorithms need some work for this part geometry.

Do you know if this is truly random bin picking? Can we see the video? Are there lasers or other hardware in use besides a single camera?

Thanks,

Jeff

Jeffrey S. Beis

Robotic Vision Scientist
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From: Jim Dara
Sent: Thursday, October 30, 2008 2:19 PM
To: Adil Shafi; Jeff Beis
Cc: Rick Weldinger
Subject: Bolt Bin Picking

Jeff, Adil - received a call from Jerry Osborn at ABB today requesting an update of status on bolt bin picking. They have seen a video of bolt bin picking on a Motoman robot running at 2 second part-part cycle time using a fixed overhead camera for vision (no vision cycle time per se). Can you please advise status of eVF and Reliabot respectively for these types of applications.

Regards,

RE: Bolt Bin Picking

Jim Dara

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Product Readiness Table 091608.xls

Content-Description: Product Readiness Table 091608.xls
Content-Type: application/vnd.ms-excel
Content-Encoding: base64

Products	Price	Status (Beta, Testing, Limited Release, Full Release, Installed)	Supportability (Internal Resources, Certified Partners, Documentation)	Target Customers (Robot OEMs, S/I Partners, Vision Providers, End Users)	Unit Estimate	Revenues Projection	Time to Market (months)	Time To Revenues (months)	Actions:
Bin Picking 3D	\$ 15,000	Installed Base	System Integrator Partners, OEM OEMs, Integrators, End Users	50	\$ 750,000	0	6	6	Understand Reliabot, Confirm Scalable, Identify Turn-key Ready Partners, Contact and visit non-automotive Reliabot Purchasers of last 2 years
Bolt Picking 2D	\$ 15,000	Installed Base	System Integrator Partners, OEM OEMs, Integrators, End Users	50	\$ 750,000	0	6	6	Understand Reliabot, Confirm Scalable, Identify Turn-key Ready Partners, Contact and visit non-automotive Reliabot Purchasers of last 3 years
Bin Picking 2D	\$ 7,500	Installed Base	System Integrator Partners, OEM OEMs, Integrators, End Users	50	\$ 375,000	0	3	3	Understand Reliabot, Confirm Scalable, Identify Turn-key Ready Partners, Contact and visit non-automotive Reliabot Purchasers of last 3 years
AutoRacking 2D	\$ 5,000	Installed Base	System Integrator Partners, OEM OEMs, Integrators, End Users	25	\$ 125,000	0	3	3	Understand Reliabot, Confirm Scalable, Identify Turn-key Ready Partners, Contact and visit non-automotive Reliabot Purchasers of last 3 years
AutoRacking 3D	\$ 10,000	Installed Base	System Integrator Partners, OEM OEMs, Integrators, End Users	25	\$ 250,000	0	3	3	Understand Reliabot, Confirm Scalable, Identify Turn-key Ready Partners, Contact and visit non-automotive Reliabot Purchasers of last 3 years
Measurement 3D	\$ 10,000	Installed Base	System Integrator Partners, OEM Installed Base, 350M	25	\$ 250,000	0	3	3	Understand Reliabot, Confirm Scalable, Identify Turn-key Ready Partners, Contact and visit non-automotive Reliabot Purchasers of last 3 years
Measurement 2D	\$ 5,000	Installed Base	System Integrator Partners, OEM Installed Base, 350M	25	\$ 125,000	0	3	3	Understand Reliabot, Confirm Scalable, Identify Turn-key Ready Partners, Contact and visit non-automotive Reliabot Purchasers of last 3 years
BYL2D	\$ 750	September	Internal	Robot, Vision OEMs	500	\$ 375,000	1	9	Who are targeted customers? What is required to productize and market?
MotorsAny	\$ 1,000	Obligation by Dec 08	Have Design.. Need Internal Resources.	Motoman Customers	50	\$ 50,000	1	6	What is technical commitment and required deliverable, Is this exclusive to Motoman and what is market potential?
SC3D	\$ 20,000	Installed ABB	ABB	Robot, System Integrators, End Users	50	\$ 1,000,000	3	9	KUKA-November // Motec-January // Fanuc-March
RBP	\$ 30,000	ABB Beta	ABB	Robot, System Integrators, End Users	12	\$ 360,000	3	9	KUKA-November // Motec-January // Fanuc-March
DM2.5D	\$ 10,000	Installed ABB	ABB	Robot, System Integrators, End Users	25	\$ 250,000	3	9	KUKA-November // Motec-January // Fanuc-March
X2D	\$ 3,500	Installed ABB	ABB	Robot, System Integrators, End Users	50	\$ 175,000	3	9	KUKA-November // Motec-January // Fanuc-March
GmD						\$ 1,420,000	6	9	ARA, AWA, PPI, other
Consumer						\$ 962,500	12	12	Lego, TBD
Estimated Annual Services						\$ 750,000	3	3	All partners & customers
						937	\$ 7,967,500		